

[INCH-POUND]
A-A-51150B
December 4, 1996
SUPERSEDING
A-A-51150A
September 24, 1991

COMMERCIAL ITEM DESCRIPTION

“V” BLOCKS AND CLAMPS, SINGLE “V” GROOVE REVERSIBLE CLAMPING

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

1. SCOPE

1.1 Scope. This commercial item description (CID) covers the requirements for “V” blocks with a single 90 degree “V” groove and a reversible clamping device.

1.2 Intended use. The “V” blocks and clamps are intended for use in the inspection of parts and other tool room operations.

2. CLASSIFICATION

2.1 Classification. The “V” blocks shall be of the solid body type consisting of the following classes and sizes. Size is determined by the maximum diametrical capacity. The class and size to be furnished shall be as specified (see 7.2).

Class: Class A - Alloy steel
Class B - Mild steel

Size: Size 1 - 1 3/8 in.
Size 2 - 2 1/4 in.
Size 3 - 4 3/8 in.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which improve this document should be sent to: Defense Supply Center Richmond, ATTN: DSCR-VBD, 8000 Jefferson Davis Highway, Richmond, VA 23297-5610.

AMSC N/A

FSC 3460

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

A-A-51150B

3. SALIENT CHARACTERISTICS

3.1 General requirements. The “V” block shall have a 90 degree “V” groove, 45 degrees from center cut, extending the entire length of the block. At the apex of the groove, a slot shall extend the length of the block to facilitate chip relief. The clamping device shall consist of a reversible yoke and two yoke screws. Unless otherwise specified (see 7.2), the “V” block shall be furnished in matched pairs and clearly marked and identified as a set.

3.2 Hardness. The Class A “V” block shall have a hardness of not less than 58 and not more than 62 on the Rockwell “C” scale when tested in accordance with ASTM E18. The Class B “V” block shall have a hardness of not less than 40 and not more than 45 on the Rockwell “C” scale when tested in accordance with ASTM E18.

3.3 Tolerance. The 90 degree “V” groove shall be central, square with the sides, and parallel to the base within 0.0003 in.. All surfaces shall be square with each other to within 0.0003 in.. The two blocks forming a matched pair shall be identical to within 0.0002 in.. The surface finish of the “V” block shall have a roughness average of not greater than 32 micro-inches when measured in accordance with ASME B46.1.

4. REGULATORY REQUIREMENTS

4.1 Recycled, recovered, or environmentally preferable materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

4.2 Environmental protection. The item shall meet all applicable Environmental Protection Agency restrictions in effect on the date of the contract. These regulations apply to the emission of materials hazardous to the environment or the user’s health and shall be met during the manufacturing, service, transportation, storage, and operation.

5. QUALITY ASSURANCE PROVISIONS

5.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, conform to the producer’s own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

6. PACKAGING

6.1 Packaging requirements. Preservation, packaging, packing and marking shall be as specified (see 7.2).

7. NOTES

7.1 Source of documents.

7.1.1 Government documents. Copies of Military and Federal documents may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

7.1.2 Industry documents. Copies of industry standards referenced in this CID may be obtained from the following addresses:

American Society of Mechanical Engineers (ASME)

ASME B46.1 Surface Texture (Surface Roughness, Waviness, and Lay)

Applications for copies should be addressed to American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017.

American Society for Testing and Materials (ASTM)

ASTM E18 Standard Test Methods for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials

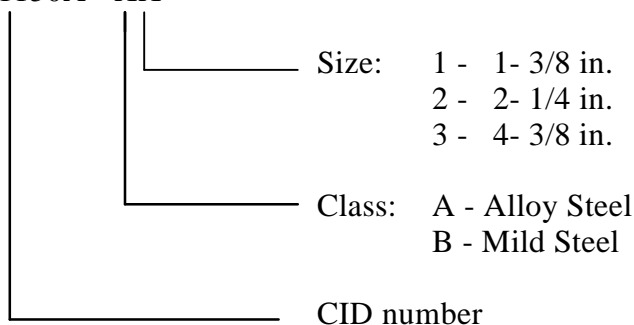
Applications for copies should be addressed to American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

7.2 Ordering data. Acquisition documents must specify the following:

- a. Title, number, and date of this document.
- b. Class and size of the "V" block required (see 2.1).
- c. Matched pairs, if required (see 3.1).
- d. Packaging requirements, if different (see 6.1).

7.3 Part identification number (PIN). The following part identification numbering procedure is for Government purposes and does not constitute a requirement for the contractor.

AA51150A - XX



A-A-51150B

MILITARY INTERESTS:

Custodians

Army - AL

Air Force - 99

Reviewers

Air Force - 84

PREPARING ACTIVITY:

DLA-GS

(Project 3460-0176)